

CLAIMS

1. A transparent polymeric composition having good impact strength, a high modulus, and good heat resistance, comprising
 - from 50% to 90% by weight of a thermoplastic matrix (I) with a refractive index n_1 ,
 - from 0 to 40% by weight of an impact additive (II) with a refractive index n_2 , and
 - from 10% to 50% by weight of a block copolymer (III) with a refractive index n_3 ,
the difference between the refractive indices, taken two by two, being less than or equal to 0.01.
- 15 2. The composition of claim 1, characterized in that the block copolymer III conforms to the following general formula - Y-B-Y' - in which
 - B is an elastomer block which is thermodynamically incompatible with blocks Y and Y',
 - Y and Y' have or do not have the same chemical composition as one another,
 - at least one of the two blocks Y and Y' is totally or partially compatible with the thermoplastic matrix (I).
- 25 3. The composition of claim 2, characterized in that B is obtained by polymerizing at least one monomer selected from butadiene, isoprene, 2,3-dimethyl-1,3-butadiene, 1,3-pentadiene and 2-phenyl-1,3-butadiene.
- 30 4. The composition of claim 3, characterized in that B is obtained by polymerizing butadiene.
5. The composition of claim 3, characterized in that B is obtained by polymerizing isoprene.
- 35 6. The composition of claim 2, characterized in that Y and Y' are obtained by polymerizing at least one

monomer selected from styrene and short-chain alkyl methacrylates such as methyl methacrylate.

7. The composition of claim 6, characterized in that
5 Y is a block composed predominantly of styrene and in
that Y' is a block composed predominantly of methyl
methacrylate.

8. The composition of claim 6, characterized in that
10 Y and Y' are blocks composed predominantly of methyl
methacrylate.

9. The composition of claim 7, characterized in that
Y' contains at least 60% of syndiotactic polymethyl
15 methacrylate.

10. The composition of claim 8, characterized in that
Y and Y' each contain at least 60% of syndiotactic
polymethyl methacrylate.

20 11. The composition of claim 1, characterized in that
the amorphous matrix I is obtained by polymerizing at
least one monomer selected from styrene, acrylonitrile,
acrylic acid, and short-chain alkyl (meth)acrylates
25 such as methyl methacrylate.

12. The composition of claim 11, characterized in
that I is obtained by polymerizing a mixture composed
of 0 to 55% by weight of styrene and from 45% to 100%
30 by weight of methyl methacrylate.

13. The composition of claim 1, characterized in that
the additive II is a core-shell copolymer composed of
an elastomer core and a rigid shell which is compatible
35 with the amorphous matrix I.

14. An article obtained by the melt-state conversion
of the composition of any one of claims 1 to 13,
characterized in that the conversion is selected from

the techniques of converting thermoplastic materials such as injection molding, extrusion or calendering.